PTO/SB/01 (08-03) Approved for use through 07/31/2006. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Attorney Docket Number **DECLARATION FOR UTILITY OR** First Named Inventor **DESIGN** PATENT APPLICATION (37 CFR 1.63) **Application Number** Filing Date Declaration Declaration June 28, 2004 Submitted Submitted after Initial Art Unit With Initial Filing (surcharge Filing (37 CFR 1.16 (e)) **Examiner Name** required) I hereby declare that: Each inventor's residence, mailing address, and citizenship are as stated below next to their name. I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled: Long-distance quantum communication (Title of the Invention) the specification of which is attached hereto was filed on (MM/DD/YYYY) as United States Application Number or PCT International Application Number and was amended on (MM/DD/YYYY) (if applicable). I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed. **Prior Foreign Application** Foreign Filing Date Priority Certified Copy Attached? Country Number(s) (MM/DD/YYYY) **Not Claimed** Yes

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto. [Page 1 of 2]

05/20/2002

PCT/US02/15135

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## **DECLARATION** — Utility or Design Patent Application

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Address						
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I hereby declare that all state and belief are believed to statements and the like so me false statements may jeopard	be true; and furtho rade are punishable	er that these s by fine or imp	statements r risonment, d	were made with or both, under 18	the knowle	edge that willful false
NAME OF SOLE OR FIRST	INVENTOR:		A notition ha	s been filed for th	المحمد	
Given Name (first and middle [if any])	Peter		4 petition na	Family Name or Surname		
Inventor's Signature	2006	2		****	_	8/05/2004
Residence: City	State		Country		Citizenshi	ip
Mailing Address	AUSTRI	<u> </u>			AUS	IRIA A
NSTITUTE FOR A-6020 INNST	THEORETIC SMICK, AU	CAL PHY STRIA	sics,	TECHNIKE	ERSTR.	25/2
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NAME OF SECOND INVENT	OR:			A petition has be	en filed for t	his unsigned inventor
Given Name (first and middle [if any])	Lumina	1		Family Name or Surname	DUA	EN .
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I hereby declare that all statem and belief are believed to be statements and the like so man false statements may jeopardiz	e true; and furt de are punishab	her that the ole by fine o	ese stat r imprisc	ements onment,	were	made with the thick the made with the made with the mader 18 l	the kno	wledge that willful false
NAME OF SOLE OR FIRST IN	VENTOR:		□ А р	etition h	as be	en filed for thi	s unsign	ned inventor
Given Name (first and middle [if any])	Peter	_			F	amily Name r Surname	, , , ,	UER
Inventor's Signature								Date
Residence: City	State			Count	ry		Citizer	nship
Mailing Address								
City	State				ZIP			Country
NAME OF SECOND INVENTO	R:				A pe	tition has bee	n filed f	or this unsigned inventor
Given Name (first and middle [if any])	Lumir	19				mily Name Surname		IAN
Inventor's Signature		of a	Ou	بر				Date 05   10   2004
Residence: City Ann Arbor	State M1	`)		Count	ry US	SA	Citizer	nship Chzna
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Ann Arbor	State	エ			ZIP	48105	Count	usA
Additional inventors or a legal re	presentative are being	ng named on th	ie s	upplemer	ntal shee	et(s) PTO/SB/02A	or 02LR	attached hereto.

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DECLARATION			NAL INVEN	ITOR(S)	Page	3_ of3_	
Name of Additional Joint Inventor, if any:		☐ A pe	tition has been	filed for this	s unsigned in	ventor	]
Given Name (first and mlddle (if any)	Family Nar	ne or Surname				]	
ou <u>tenacio</u>		CIRAC					
Inventor's Signature	···········				Date Lu	ne 82,04	
Residence: City Garching	State		Country Ger	many	I	Spanish	DE
Mailing Address Brunnenweg 25, D-8574	48 Garc	hing G	ermany				
Mailing Address							
City	State		Zip	· .	Country		]
Name of Additional Joint Inventor, if any:		☐ A pe	ition has been	filed for this	unsigned inv	ventor	
Given Name (first and middle (if any))			Fam	ily Name or	Sumama		
Mikhail D.		WKIN					
Inventor's Signature	<u>.</u>	Date		-	•		
Residence: City	State		Country			Citizenship	]
Mailing Address		·					
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City	State		Zip		Country		
Name of Additional Joint Inventor, if any:		☐ A pe	ition has been t	iled for this	unsigned inv	entor	
Given Name (first and middle (if any)		- <del>i</del>	Famil	y Name or	Surname	·	]
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DECLARATION	Supplementa	AL INVENTOR	·(5)	Page	3of3		
Name of Additional Joint Inventor, if any:		A petition	on has been filed t	for this un	signed inve	ntor	
Given Name (first and middle (if any)	Family Name	or Surname					
Ignacio		CII	ZAC		-		
Inventor's Signature	<b></b>			D	ate		
Residence: City	State		Country		Citizenship		
Mailing Address					+		
Mailing Address	<u> </u>			<u> </u>			
City	State		Zip		Country		
Name of Additional Joint Inventor, if any:		A petiti	on has been filed	for this un	signed inve	entor	
Given Name (first and middle (if any))		Family Name or Surname					
Mikhail D.			LUKIN	1			
Inventor's Signature		Date 6	117104	•	•		
Residence: City Cymbridge	State	(MA)	Country	us		Citizenship RF	
Mailing Address 121 Chilton St.			<del></del>		(Russia	n Federation	
Mailing Address							
city Cambridge	State	MA	Zip 0213	38	Country	USA	
Name of Additional Joint Inventor, if any:		☐ A petit	ion has been filed	for this u	nsigned inv	entor	
Given Name (first and middle (if any)			Family N	ame or Su	ırname	· 	
Inventor's Signature		Date					
Residence: City	State		Country			Citizenship	
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any and all attached to	s) or agent(s) to represent the undersigned before the Unit patent applications assigned only to the undersigned accorthis form in accordance with 37 CFR 3.73(b).  Name and Address:			
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required may be c authorize	f this form, together with a statement under to be filed in each application in which this completed by one of the practitioners appoin ed to act on behalf of the assignee, and mus isto be filed.	form is used. The ted in this form	ne statemer if the appoi	nt under 37 CFR 3.73(b) Inted practitioner is
		ssignee of Record I below is authorized	to act on behal	of the assignee
Name	AUDRIUS BERŽANSKIS			
Signature	Ab		Date	04/07/2004
Title	VP, Security Engineering an	d Sattware	Telephone	04/07/2 <i>0</i> 04 617 661 8300

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STATEMENT UNDER 37 CFR 3.73(b)
Applicant/Patent Owner: Zdler, Roler; DUAN, Luming; CIRAC, Ignacio; LUKIN, Wikhail
Application No./Patent No.: Filed/Issue Date:
Entitled: Long-distance quantum communication
Entitled: Long-distance quantum communication  Majo technologies, Inc., a Corporation  (Name blassignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is:  1. 💢 the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  The extent (by percentage) of its ownership interest is ——————————————————————————————————
A. [ ] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
OR
B. [ ] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
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[ ] Additional documents in the chain of title are listed on a supplemental sheet.
Copies of assignments or other documents in the chain of title are attached.  [NOTE: A separate copy ( <i>i.e.</i> , the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.    Une 28, 2004   Useph E. Bortung
Date Typed or printed name (41.741)
Telephone number Signature
Assigned Auth. Rep.

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